

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims:

1. (Currently Amended) ~~An implantable medical device with a calcium phosphate coating~~ A stent comprising:

- (a) substrate; and
- (b) calcium phosphate coating on the substrate, wherein said coating ~~having desired bonding and porosity characteristics~~ has a thickness of no more than 1  $\mu\text{m}$ .

2. (Currently Amended) A ~~device~~ stent as claimed in claim 1 wherein the calcium phosphate coating ~~[[is]]~~ comprises hydroxyapatite.

3. (Currently Amended) A ~~device~~ stent as claimed in claim 1 wherein the thickness of the calcium phosphate coating is between about ~~0.00001 mm and 0.01 mm~~ 0.01  $\mu\text{m}$  to 1  $\mu\text{m}$ .

4. (Currently Amended). A ~~device~~ stent as claimed in claim 1 wherein the thickness of the calcium phosphate coating is between about ~~0.001 mm and about 0.0001 mm~~ 0.1  $\mu\text{m}$  to 1  $\mu\text{m}$ .

5. (Currently Amended) A ~~device~~ stent as claimed in claim 1 wherein the tensile bond strength between the substrate and the calcium phosphate coating is greater than about 20 MPa.

6. (Cancelled).

7. (Currently Amended) A ~~device~~ stent as claimed in claim 1 wherein the ~~particles~~ coating covers about 20% to about 99% of the surface of the substrate.

8. (Currently Amended) A ~~device~~ stent as claimed in claim 1 wherein the substrate is ~~constructed of~~ comprises a metal or metal alloy selected from stainless steel, cobalt alloy, titanium, cobalt-chromium, cobalt-iron, and cobalt-chromium-nickel-molybdenum-iron ~~or metallic alloy~~.

9. (Currently Amended) A ~~device~~ stent as claimed in claim 1 wherein the calcium phosphate coating is porous and the pores retain and ~~[[elude]]~~ elute a drug.

10. (Cancelled).

11. (Currently Amended) A ~~device~~ stent as claimed in claim ~~[[10]]~~ 9 wherein the substrate has a first calcium phosphate coating and a second calcium phosphate coating and the drug is contained in the first and second coatings.

12. (Currently Amended) A ~~device~~ stent as claimed in claim 9 wherein the drug inhibits restenosis.

13. (Currently Amended) A ~~device~~ stent as claimed in claim 1 wherein the calcium phosphate coating ~~[[is]]~~ comprises dicalcium phosphate, tricalcium phosphate or tetracalcium phosphate.

14-36. (Cancelled).

37. (New) A stent as claimed in claim 1, wherein the tensile bond strength between the substrate and the calcium phosphate coating is greater than about 40 MPa.

38. (New) A stent as claimed in claim 1, wherein the calcium phosphate coating is an electrochemically deposited coating.

39. (New) A stent as claimed in claim 1, wherein the calcium phosphate coating is an electrophoretically deposited coating.

40. (New) A stent as claimed in claim 1, wherein the calcium phosphate coating is a sol gel deposited coating.

41. (New) A stent as claimed in claim 1, wherein the calcium phosphate coating is an aerosol gel deposited coating.

42. (New) A stent as claimed in claim 1, wherein the calcium phosphate coating is a dip-coated coating.

43. (New) A stent as claimed in claim 1, wherein the calcium phosphate coating is a spin-coated coating.

44. (New) A device comprising:

(a) a substrate; and

(b) a calcium phosphate coating on the substrate,

wherein the coating has a thickness ranging from 1 to 10  $\mu\text{m}$ , and

wherein the coating is discontinuous in the form of islands or patches having a diameter ranging from 1  $\mu\text{m}$  to 100  $\mu\text{m}$ .

45. (New) A device as claimed in claim 44, wherein the device is a stent.

46. (New) A device as claimed in claim 44, wherein the calcium phosphate coating comprises hydroxyapatite.

47. (New) A device as claimed in claim 44, wherein the calcium phosphate coating comprises dicalcium phosphate, tricalcium phosphate or tetracalcium phosphate.

48. (New) A device as claimed in claim 44, wherein a tensile bond strength between the substrate and the calcium phosphate coating is greater than 20 MPa.

49. (New) A device as claimed in claim 44, wherein a tensile bond strength between the substrate and the calcium phosphate coating is greater than 40 MPa.

50. (New) A device as claimed in claim 44, wherein the calcium phosphate coating is porous and the pores retain and elute a drug.

51. (New) A device as claimed in claim 50, wherein the substrate has a first calcium phosphate coating and a second calcium phosphate coating and the drug is contained in the first and second coatings.

52. (New) A device as claimed in claim 50, wherein the drug inhibits restenosis.

53. (New) A device as claimed in claim 44, wherein the substrate comprises a metal or metal alloy selected from stainless steel, cobalt alloy, titanium, cobalt-chromium, cobalt-iron, and cobalt-chromium-nickel-molybdenum-iron.

54. (New) A device as claimed in claim 44, wherein the calcium phosphate coating is an electrochemically deposited coating.

55. (New) A device as claimed in claim 44, wherein the calcium phosphate coating is an electrophoretically deposited coating.

56. (New) A device as claimed in claim 44, wherein the calcium phosphate coating is a sol gel deposited coating.

57. (New) A device as claimed in claim 44, wherein the calcium phosphate coating is a dip-coated coating.

58. (New) A device as claimed in claim 44, wherein the calcium phosphate coating is a spin-coated coating.

59. (New) A device as claimed in claim 44, further comprising a continuous coating having a thickness no more than 1  $\mu\text{m}$ .